

### **DETAILED ACTION**

1. In view of the Pre-Brief Conference request filed on 05/04/09, PROSECUTION IS HEREBY REOPENED. An Allowance action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. John F. Kacvinsky on 09/23/09.

3. The application has been amended as follows:

**IN THE CLAIMS:**

Claim 8, line 7, the limitation “for said packet;” has been replaced by --- for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths;

selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths; ---.

Claim 8, line 8, the limitation “said packet classification; and” has been replaced by --- said packet classification for said selected next hop; and ---.

Claim 11, line 1, the limitation “said routing information from a routing table” has been replaced by --- said advanced routing information from said identified routing table ---.

Claim 12, line 7, the limitation “for said packet;” has been replaced by --- for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or

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aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths;

selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths; ---.

Claim 12, line 9, the limitation “said packet classification; and” has been replaced by --- said packet classification for said selected next hop; and ---.

Claim 15, line 2, the limitation “said routing information from a routing table” has been replaced by --- said advanced routing information from said identified routing table ---.

Claim 16, line 1, the limitation “advanced network services” has been replaced by --- advanced routing services ---.

Claim 16, line 3, the limitation “advanced network service” has been replaced by --- advanced routing service ---.

Claim 16, line 9, the limitation “performing said advanced network service for said packet; and” has been replaced by --- determining a packet classification for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths;

selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths;

retrieving advanced routing information corresponding to said packet classification for said selected next hop; and ---.

Claim 16, line 10, the limitation "sending said packet over a second virtual connection." has been replaced by --- sending said packet over a second virtual connection using said advanced routing information. ---.

Claim 23, line 10, the limitation "for said packet;" has been replaced by --- for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths, selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths, ---.

Claim 23, line 11, the limitation "to said packet classification," has been replaced by --- to said packet classification for said selected next hop, ---.

Claim 27, line 4, the limitation "advanced network services at an advanced network services provider" has been replaced by --- advanced routing services at an advanced routing services provider ---.

Claim 27, line 5, the limitation “for an advanced network service” has been replaced by --- for an advanced routing service ---.

Claim 27, line 7, the limitation “said advanced network service” has been replaced by --- said advanced routing service ---.

Claim 27, line 8, the limitation “performing said advanced network service for said packet prior to routing said packet to said destination,” has been replaced by --- determining a packet classification for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths, selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths, retrieving advanced routing information corresponding to said packet classification for said selected next hop, and --  
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Claim 27, line 10, the limitation “over a second virtual connection.” has been replaced by --- over a second virtual connection using said advanced routing information. ---.

Claim 29, lines 3-6, the limitation “a network node configured to perform basic routing services to connect to said communication medium, said network node to

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receive a packet to be routed to a destination and determine whether said packet requires advanced routing services or advanced network services not included in said basic routing services;" has been deleted.

Claim 29, line 8, the limitation "hosted advanced routing server to provide said advanced routing services or advanced network services for said packet prior to said packet being routed to said destination." has been replaced by --- hosted advanced routing server operative to receive a packet to be routed to a destination and a request for advanced routing information from an intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services to route said packet to said destination which are not included in said basic routing services, said hosted advanced routing server to determine a packet classification for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths, said hosted advanced routing server further operative to select one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths, retrieve advanced routing information corresponding to said packet classification for said selected next hop, and route said packet to said selected next hop using said

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advanced routing information or send said advanced routing information to said intermediate node. ---.

Claim 33, line 1, the limitation "wherein said network node establishes a virtual connection to said hosted advanced routing server over said communication medium." has been replaced by --- wherein a virtual connection to said hosted advanced routing server is established over said communication medium. ---.

Claims 1-7, 18-22, 25-26 and 30-32 have been cancelled.

***Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance:

Regarding claims 8, 12, 16, 23, and 27, the prior art fails to teach a combination of the steps of:

determining a packet classification for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths;

selecting one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths, in the specific combination as recited in the claims.

Regarding claim 29, the prior art fails to teach a combination of the steps of:

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a hosted advanced routing server to connect to said communication medium, said hosted advanced routing server operative to receive a packet to be routed to a destination and a request for advanced routing information from an intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services to route said packet to said destination which are not included in said basic routing services, said hosted advanced routing server to determine a packet classification for said packet, said packet classification representing control information used to identify one of multiple routing tables, with said identified routing table having a destination address, multiple routing paths for a next hop corresponding to said destination address, and a cost based on a hop count associated with each of said multiple routing paths, said identified routing table implementing a dynamic routing protocol to receive periodic or aperiodic updates to said multiple routing paths and associated costs for each of said multiple routing paths, said hosted advanced routing server further operative to select one of said multiple routing paths as a next hop for said packet having a lower cost than another one of said multiple routing paths, retrieve advanced routing information corresponding to said packet classification for said selected next hop, and route said packet to said selected next hop using said advanced routing information or send said advanced routing information to said intermediate node, in the specific combination as recited in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably



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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./  
Examiner, Art Unit 2416

/William Trost/  
Supervisory Patent Examiner, Art Unit 2416